# Sanjana Chitteni

TX | 6608699593 | schitten@ttu.edu | LinkedIn

# **PROFESSIONALSUMMARY**

DevOps Engineer with 3+ years of experience in automating, deploying, and releasing code in SDLC, Agile, and Waterfall environments. Proficient in Chef, Nagios, Ansible, Docker, Kubernetes, AWS (EC2, ELB, ASG, S3, DynamoDB, RDS, EKS, VPC, Route53, SNS, SQS), Monitoring tools (Nagios, Splunk, Cloudwatch, ELK Stack, Dynatrace, Prometheus, and App Dynamics), and skilled in Jenkins, Maven, and scripting (Python, Shell, PowerShell). Also, adept at RDBMS (MySQL, SQL Server) and utilizing Jira, Jenkins, and GitHub for real-time issue tracking.

### **WORK EXPERIENCE**

# Associate Devops Engineer | Standard Chartered | Bangalore, India

April 2022 – July 2022

- Created highly available infrastructure in AWS cloud by using various AWS services like EKS, VPC, Route53, Security groups,
   Lambda, ECR, Cloudwatch and Autoscaling
- Hands-on Experience with AWS Lambda service to run codes in response to events and automatically manage resources and
  replication of on premise data using AWS Database Migration service and integrating the DBS with cloud watch and cloud Trial.
- Implemented a serverless architecture using API Gateway, Lambda, and DynamoDB and deployed AWS Lambda code from Amazon S3 buckets. Created a Lambda deployment function, configured it to receive events from our S3 buckets and provisioned Lambda functions to create a Log stash for centralized logging.
- Automated AWS Auto Scaling Groups (Scale Up &Scale Down) instances using AWS Lambda and Python, resulting in a yearly cost savings of \$50K-\$60K.
- Automated and implemented a nightly shutdown routine for AWS RDS services in Development (Dev) and Stage accounts using
   Amazon EventBridge and event-driven architectures, resulting in monthly cost savings of \$600 USD.
- Extensively worked with Scheduling, deploying, managing container replicas onto a node using **Kubernetes** and experienced in creating Kubernetes clusters work with **Helm charts** running on the same cluster resources.
- Proficient in using ArgoCD for GitOps-based application deployments and managing Kubernetes clusters. Familiarity with NoSQL technologies such as MongoDB, Redis.
- Designed and developed AWS Cloud Formation templates to create custom VPC, Subnets, NAT to ensure deployment of web
  applications.
- Familiarity with Backup/Restore, Disaster Recovery, DevOps, and system automation, adding value to infrastructure management and maintenance.
- Experienced in leveraging Prometheus, PromQL, and Grafana to collect, analyze, and visualize infrastructure metrics.

### Devops Engineer | Standard Chartered | Bangalore, India

January 2019 – April 2022

- Extensive experience in the areas of Build/Release/Deployment/Operations, with in depth knowledge of principles and best practices of SCM in Agile, Scrum methodologies.
- Designing, deploying and maintaining end-to-end CI/CD pipelines, and reducing deployment time by 30%.
- Involved in **Linux administration** activities like troubleshooting of regular issues, configuration issues, applying patches, kernel upgrades, package management, diagnosing resource utilization and file system issues.
- Automatically provision infrastructure using Terraform, helping to save costs by 20%.
- Familiarity with containerization tools such as **Docker** and container orchestration platforms like **Kubernetes** for deploying and managing **microservices** and **serverless** workloads.
- Collaborating with development and operations teams to optimize resource usage.
- Configuring and managing web servers and SQL servers on clustered environments.
- Automated routine server monitoring tasks through custom **shell scripts**, reducing manual effort by 40% and enabling faster issue resolution.
- Experience with **RESTful APIs and web services**, facilitating seamless integration and communication between distributed systems and serverless functions.
- Managed Kubernetes charts using Helm. Created reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and managed releases of Helm packages.
- Led efforts to improve security measures, resulting in zero security incidents during tenure.
- Provide **on-demand support** and resolve critical issues to minimize.
- Developed **Dev/Test/Prod environments** of various applications on AWS by provisioning **K8'S** clusters on AWS EC2 instances.
- Led infrastructure automation with **Terraform** and **Ansible**, minimizing errors and ensuring consistency. Utilized **Ansible Tower** for streamlined dashboard access and role-based controls, facilitating team-based deployments.
- Experience with build management tool **Ant and Maven** for writing build. xmls and pom.xmls
- Developed a fully automated continuous integration system using GIT, Jenkins and custom tools developed in Python and Bash.
- Built and released Cloud products with Linux (Centos, RHEL, Ubuntu) and Windows environments using PowerShell, Python, Ruby.

#### **PROJECTS**

# Netflix Clone CI/CD pipeline with Monitoring and Alerting

November 2023

Orchestrated the deployment of a feature-rich Netflix clone application into a Kubernetes cluster, replicating the original platform's through the utilization of diverse DevOps tools.

# Deployed a containerized web application named "ProjectX" on Amazon EKS

September 2023

The web application was packaged and deployed using a Docker container image, utilizing Git for version control, Maven for efficient builds, and Jenkins for seamless CI/CD. This ensured controlled replication and automated pod recovery to ensure high availability on Amazon EKS.

#### **Terraform Infrastructure Automation**

February 2023

Used Terraform for AWS infrastructure deployment, ensuring versioned resource management. Established a streamlined remote backend with Amazon S3 and DynamoDB for controlled infrastructure deployments.

### **Enhanced Security and Reduced Docker Image Size**

October 2022

Implemented multi-stage Docker builds to reduce application image size from 861MB to 1.83MB and enhance security. Utilized distroless images for a lightweight runtime, eliminating unnecessary dependencies and maintaining optimal performance.

### **TECHNICAL SKILLS**

- SDLC Methodologies: Agile, Waterfall
- Containers and Orchestration Tools: Docker, Kubernetes, AWS ECS, Docker Swarm
- **AWS Services:** EC2, IAM, Elastic Beanstalk, Elastic Load Balancer, RDS, S3, Cloudfront, Glacier, SQS, SNS, Cloud Formation, Route53, Dynamo DB, Athena, Kinesis, VPC, Direct Connect, Storage Gateway.
- Scripting Languages: Python, PowerShell, Perl, Shell/Bash Scripting
- Web/App Servers: Nginx, Web Logic, Apache Tomcat, JBoss, Jetty
- CI-CD/Version Control/Other Tools: Maven, Gradle, Jenkins, Git, GitHub, Jira, Junit, ServiceNow
- Database & Operating Systems: MS SQL Server, Oracle, MongoDB, MySQL, unix/Linux, Windows
- Automation Tools/Configuration Management: Chef, Puppet, Docker, Vagrant, Ansible, Jenkins, Terraform, Kubernetes
- Monitoring Tools: Kibana, Newrelic, Dynatrace, Prometheus, PromQL, CloudWatch, Nagios, Grafana, Splunk

### **CERTIFICATIONS**

- ✓ AWS Certified Solutions Architect- Associate
- ✓ AWS Certified Cloud Practitioner
- ✓ NPTEL(National Programme on Technology Enhanced Learning)- Python

# **EDUCATION**

**Masters in Computer Science** 

August 2022- May 2024

Texas Tech University, Lubbock Texas

CGPA: 3.64

**Bachelor of Engineering in Electronics and Communication Engineering** 

August 2016 - April 2020

College of Engineering Guindy (CEG), Chennai, Tamil Nadu, India

CGPA: 3.71